To:

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From:

J. H. Kreisher

Subject:

Authorization for commercial development of Walton

Horizontal Smoke Exposure Machine

The attached request for consideration of release of current prototypical smoking machine design has been received.

The machine is being successfully used by a number of investigators, and the design for intermittent smoking appears to be about as "final" as any design ever will be.

Chemical studies of smoke constituents, mixing characteristics, and small animal (mouse) dosimetry are well underway or will be initiated within the next few months. The first backup material concerning smoke composition is being prepared for publication; and additional studies, as completed, will be published to provide additional direction to non-familiar investigators. These findings are also being incorporated into a Manual. Drawings are being made for a final "Manual", which is currently being rewritten.

Animal holder studies are progressing well. The mouse and rat adapt seemingly well in the newest holder configurations. Stress (serum corticosteroid level and brain protein production) studies are continuing, and data for adaptation to specific holder types with and without chronic intermittent smoke exposure over a prolonged (two month) period will be available soon.

It is estimated that, once permission is given to build machines commercially, the earliest that these could be available for sale in any numbers would be one year from now, due to delays in parts delivery, etc.

The advanced status of prototype development and the satisfactory performance characteristics (over one year in continuous 24 hr/dy operation without breakdown), make consideration of a release request for commercial production reasonable at this time.

J.H.K.

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